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REMARKS

Claims 2-3, 5-19, 24-25, 27-41, 46-47, 49-62, 87-88, and 90-104 remain in this case for consideration. Claims 2, 24, 31, 46, 53, 87, 94, 95, 96, 99, 101, 102, and 104 have been amended to better define Applicants' invention. Support for Applicants' claim amendments can be found, among other places, in the Abstract and paragraph 18 of Applicants' patent application.

A.   Prior Art Rejections

1.   The Invention

Applicants have invented a data rating software application programmed into a wireless device to determine charges assessed for wireless data communications so that those charges can then be deducted from an account related to the wireless device. Unlike existing systems which calculate wireless communication charges by selecting, usually at the network server, a rate based upon distance or time-of-day and then multiplying that rate by the duration of the phone call, Applicants' data rating software application allows the wireless device itself to select one or more rates and one or more units of measure applicable to the data communication session as determined by type of data, the usage of the data, the source of the data, the service level selected, the service level achieved and/or the connection method. The rate is a quantity of money per unit of measure and the units of measure include the quantity of bytes, quantity of data packets and/or the connection involved in the communication. After a charge is determined by multiplying a rate by a unit of measure, the charge is deducted from an account (e.g., prepaid or credit limit) related to the wireless device. In some embodiments, the selection of rates and units of measure is triggered by the data rating application detecting one or more events (or factors) which take place during the course of setting up the data communication session (e.g., a detected connection between the wireless device and the network).

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2.   The Cited Art Distinguished

Claims 2-20, 24-42, 46-63 and 87-105 have been rejected under 35 U.S.C. §

103(a) as being obvious over Grimes' U.S. Patent No. 6,434,537 ("Grimes patent") in view of

various combinations of Barabash's U.S. Patent No. 6,101,378 ("Barabash patent"), Schmid's

U.S. Patent No. 5,887,249 ("Schmid patent"), Applicant's alleged admitted art and Schilling's

U.S. Patent No. 7,137,548 ("Schilling patent").

Grimes patent

The Grimes patent discloses a system for informing a cellular telephone user of

cumulative billing information, the charge rate for the current voice call, and the charge for the

current voice call based on the downloaded charge rate and duration of the call. The cumulative

billing information and the current charge rate are downloaded from the network.

In the Office Action, it is alleged that Grimes teaches the following elements of

Applicant's claimed invention: (1) "a data rating application residing in the wireless device"; (2)

"both the rate and the unit of measure are determined by the type of data, the usage of data, the

source of the data, the service level selected, the service level achieved and/or the connection

method"; (3) " wherein the units measure include the quality [sic] of bytes, quality [sic] of data

packets and/or the connection involved in the communication"; (4) "the charge includes flat rate

for each connection"; (5) "the data rating application is configured to detect one of a plurality of

events which takes place during the course of setting up the data communication session,

wherein the event is indicative of the type of data, the usage of the data, the source of the data,

the service level selected and/or the connection method wherein the origin of the event is either

the network or the wireless device"; (6) "the wireless device includes a plurality of additional

applications residing therein..., and wherein the data rating application is configured to

determine the rate and unit of measure based on which of the plurality of additional applications

residing in the wireless device"; (7) "the charge is based on usage of data received during the

data communication session"; (8) "the charge is determined based on occurrence or duration of

usage of the downloaded application"; (9) "the charge is based on source of data received by the

wireless device during the data communication"; (10) "the charge is based on service level

selected for the data communication session"; (11) "the service level selected relates to speed

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and/or accuracy of data transmission during the data communication session"; (12) "the charge is based on service level achieved during the data communication session"; and (13) "the charge is based upon the connection method".

Contrary to the Examiner's assertions, the Grimes patent does not teach any of these elements of the Applicant's invention. For example, Grimes teaches that rates are determined at a network billing computer and downloaded to the wireless device (see Grimes' Abstract, column 1 line 67 - column 2 line 1; Figure 1; column 2 lines 57-59; column 3 lines 15-19 and lines 56-61; column 3 line 66 - column 4 line 7; Figure 3; column 4 lines 47-53). By contrast, Applicants' invention teaches that the rates are determined within the wireless device by the internal data rating application (see Applicant's Abstract, ¶ 3, ¶ 10, ¶ 11, and others).

Nor does the Grimes patent teach any aspect of data communication rating. The Grimes patent teaches the typical method for rating a voice communication, namely multiplying the charge rate by the duration (or air time) of the call. Grimes does not teach any of the factors that are useful for rating a data communication: type of data, the usage of data, the source of the data, the service level selected, the service level achieved and/or the connection method. The Examiner apparently misunderstands Applicant's "usage of data" concept, because it is a unit of measure that is completely independent of the duration (or airtime) involved in the communication session. As described in paragraph 38 of Applicant's patent application, a typical example of a rating scheme based on "usage of data" is a game downloaded to a wireless device, where the charge is based on each use of the game. Usage of the game might be incident or time based, but it is not based on the duration (or airtime) of the data communication session that downloaded the game.

Nor does the Grimes patent teach any of the units of measure that are useful for metering a data communication: quantity of bytes, quantity of data packets and/or the connection. The Grimes patent teaches the typical method for metering a voice communication, namely the duration (or air time) of the call. Although the excerpt cited by the Examiner (column 2, line 67 to column 3, line 5) describes a number of factors that affect the charge rate, the only unit of measure described is "the elapsed air time". By contrast, Applicant's invention teaches multiple units of measure that are useful for metering a data communication, specifically

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quantity of bytes, quantity of data packets and/or the connection. (see, paragraphs 10, 19, 33 and others of Applicant's patent application).

Grimes does not teach that the charge for a communication session includes a flat rate for each connection. The excerpt cited by the Examiner (column 2, lines 1-7) describes only one unit of measure for determining the cost of a call, namely "the duration (air time)". By contrast, Applicant's invention teaches units of measure that are useful for metering a data communication, including metering by connection (see paragraph 29 and others of Applicant's patent application).

Grimes also fails to teach a data rating application configured to detect one or more of a plurality of events which takes place during the course of setting up the data communication session, wherein the event is indicative of the type of data, the usage of the data, the source of the data, the service level selected and/or the connection method wherein the origin of the event is either the network or the wireless device. The excerpts cited by the Examiner (column 2, line 1-7 and column 2, line 67 to column 3, line 5) may inherently describe a "begin event" and an "end event" in order to determine a "duration", but do not disclose any setup event from the network or the wireless device that is indicative of the type of data, the usage of the data, the source of the data, the service level selected and/or the connection method. By contrast, Applicant's invention teaches that the data rating application detects the setup event used in order to select the appropriate rating method (see paragraphs 10, 24 - 28, 37, and 39 - 41 and others of Applicant's patent application).

Nor does the Grimes patent teach a data rating application configured to determine the rate and unit of measure based on which one of a plurality of additional applications residing in the wireless device will be using data received by the wireless device during the data communication session. The excerpts cited by the Examiner (column 2, line 1-7 and column 2, line 67 to column 3, line 5) simply to not state or imply the teachings asserted by the Examiner. By contrast, such teachings can be found in Applicant's application (see. paragraphs18 and 37 of Applicant's patent application).

Nor does the Grimes patent teach that the charge is based on usage of data (or a downloaded application) received during the data communication session. The Examiner's

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office action contains the following citation "(see column 2, line 1-7, see "duration" or "air time" and it reads on Applicant's "the usage of data". In addition, see column 2, line 67 to column 3, line 5)". As discussed above, the Examiner apparently misunderstands Applicant's "usage of data" concept, because it is a unit of measure that is completely independent of the duration (or airtime) involved in the communication session. More specifically, as described in paragraph 38 of Applicant's patent application, a typical example of a rating scheme based on "usage of data" is a game downloaded to a wireless device, where the charge is based on each use of the game. Usage of the game might be incident or time based, but it is not based on the duration (or airtime) of the data communication session that downloaded the game.

Finally, there is no teaching in Grimes regarding: "the charge is based on source of data received by the wireless device during the data communication"; "the charge is based on service level selected for the data communication session"; "the service level selected relates to speed and/or accuracy of data transmission during the data communication session"; "the charge is based on service level achieved during the data communication session"; or "the charge is based upon the connection method." The excerpts cited by the Examiner (column 2, line 1-7 and column 2, line 67 to column 3, line 5) simply do not state or imply the teachings asserted by the Examiner. By contrast, such teachings can be found in Applicant's patent application at paragraphs 10, 18, 40, 41, 42 and others.

Barabash patent

The Barabash patent discloses a prepaid cellular telephone system in which a network billing computer (the debit processing unit) maintains a prepaid account for the subscriber, debits the prepaid account as the subscriber makes and receives calls, and instructs the network to deny a call (or instructs the phone to disable itself) if the account balance is insufficient. The debit processing unit and mobile phone can communicate with each other using short bursts of data over the voice channel. Like the Grimes patent, the Barabash patent fails to teach that rates for a communication session are determined within the wireless device by an internal data rating application or any aspect of data communication rating. By contrast, Applicants' invention teaches that the rates are determined within the wireless device by an internal data rating application (see Applicant's Abstract as well as paragraphs 3, 10, 11, and

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others of Applicant's patent application) and teaches factors and units of measure that are useful for rating a data communication (see paragraphs 10, 19, 33, 38 and others of Applicant's patent application).

The calculation of deductible charges within the wireless device using Applicant's data rating software application is an important advantage of Applicants' invention over existing network centric billing systems. As explained in paragraphs 6 through 9 of Applicants' patent application, monitoring and keeping track of data packets accurately for billing purposes at the network level is not a simple task. When data packets are sent to a destination, they are usually routed via several nodes and networks before they reach their final destination. Traversing several networks presents a problem from a monitoring and billing perspective because different networks often handle and bill data packets differently. The problem of accounting for data transmission is further complicated when the network(s) needs to resend some packets, possibly through alternative routes. As such, a complicated arrangement of servers and protocols is needed to coordinate billing information between networks, and among nodes within the same network, for the typical data communication.

By contrast, in Applicants' system, all the charges for data billing are calculated in the wireless device by the data rating software application and, as such, reside in the wireless device itself. In Applicants' system, there is no need for network servers to coordinate among themselves to determine the charge for a data transmission. A robust data rating algorithm is built into the wireless device which does all the necessary calculation for both outgoing and incoming data communications. As such, Applicant's decentralized approach (i.e., within the wireless device) to data billing removes a great deal of the burden borne by network servers under the common centralized approach to data billing.

Schmid patent

The Schmid patent discloses a method for establishing a cellular service account in which the cellular system sends prompts for account information to the cellular radio telephone, the cellular radio telephone sends a response with account information to those prompts back to the cellular system, and the cellular system stores the account information to establish the cellular service account. Contrary to the Examiner's assertion, the Schmid patent

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does not teach an account that resides within the wireless device. In fact, Schmid clearly distinguishes between the cellular radio telephone and the cellular system in teaching that the cellular system stores the account information (see Schmid Abstract, see also column 2 lines 34-36 and lines 51-53). Also, the Schmid patent does not teach that rates for a communication session are determined in the wireless device by a data rating application within the wireless device or any aspect of data communication rating. By contrast, Applicants' invention teaches that the rates are determined within the wireless device by an internal data rating application (see Applicant's Abstract and paragraphs 3, 10, 11 and others of Applicant's patent application) and teaches factors and units of measure that are useful for rating a data communication (see paragraphs 10, 19, 33, 38 and others of Applicant's patent application).

Applicant's alleged admitted prior art

Although the Applicant's discussion in the "background of the invention" section may imply an account residing at a location external to the wireless device ("billing systems reside at a mobile switching center"), there is no disclosure or suggestion in Applicant's patent application that the prior art teaches rates for a data communication session being determined by a data rating application within the wireless device. By contrast, Applicants' invention teaches that the rates are determined within the wireless device by an internal data rating application (see Applicant's Abstract and paragraphs 3, 10, 11, and others of Applicant's patent application) and teaches factors and units of measure that are useful for rating a data communication (see paragraphs 10, 19, 33, 38 and others of Applicant's patent application).

Schilling patent

The Schilling patent discloses the application of removable debit/credit cards or smart cards in radio or fixed wire telephone systems. The removable card stores telephone numbers associated with the owner of the card so that, upon insertion of the card into a telephone with a card reader, the telephone receives calls associated with the owner of the card. In some embodiments, the card stores an available debit/credit amount. In other embodiments, a telephone is equipped with a card writer that permits the available debit/credit amount stored on the card to be rewritten. Although the Schilling patent discloses maintaining an available balance on a smart card for display or warning purposes, it does not suggest or disclose a data

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rating application residing on a smart card. Rather, the Schilling patent discloses an "end station", external to the smart card and telephone, as the means for accounting for call charges (see column 13 line 62 - column 14 line 25) and thus teaches away from having a data rating application reside in the smart card or telephone. By contrast, Applicants' invention teaches that the rates are determined within the wireless device by an internal data rating application (see Applicant's Abstract and paragraphs 3, 10, 11, and others of Applicant's patent application) and teaches factors and units of measure that are useful for rating a data communication (see paragraphs 10, 19, 33, 38 and others of Applicant's patent application).

None of the cited references include an internal data rating application within a wireless device (or its smart card) that deducts the charge for a data communication session from an account related to the wireless device (or smart card). For these reasons, the Grimes patent, either alone or in view of any combination within the Barabash patent, Schmid patent, Applicant's admitted prior art and/or the Schilling patent, fails to teach Applicant's claimed invention and, as such, none of Applicant's currently pending claims are unpatentable for obviousness.

CONCLUSION

In view of the foregoing, Applicants believe all claims now pending in this Application are in condition for allowance and early issuance of a Notice of Allowance is warranted. If the Examiner believes a telephone conference would expedite prosecution of this application, please telephone the undersigned at (415) 576-0200.

Respectfully submitted,

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